THE SEATTLE MUNICIPAL STREET-RAILWAY SYSTEM

Seattle is the first large city in the United States to own and operate its street-car lines in their entirety. It is of more than passing interest, therefore, to ascertain the circumstances under which it took over the lines and what success has attended their operation.

I. THE PURCHASE OF THE STREET-RAILWAY SYSTEM

Like practically every other American city, the early stages of Seattle's growth were accompanied by the construction of a number of competing street-car lines. By 1901, however, these small rival lines had been bought up by a subsidiary of the Stone and Webster Company and a consolidated trolley system was introduced. This company not only owned the car lines but also owned numerous water-power sites and furnished commercial light and power to the city and to the surrounding localities. With its monopoly of effective power and of local transportation and owned as it was by absentee capital, it soon became, for one reason or another, distinctly unpopular, and in 1902 the city proceeded to develop the Cedar River power project and in 1905 entered into active competition with the company in the furnishing of light and power. The success of the city in these ventures was distinct, and the bitterness between the citizens and the company increased with the years. Constant litigation was resorted to, and it seemed unlikely that the street-car franchises which expired in 1925 and 1934 would be renewed.

From 1915 to 1918 the company, like all street-car concerns, fell into increasing difficulties. On the one hand, the rapid increase in the cost of materials, and after a lag the upward movement of wages, increased expenses. On the other hand, the company could not secure a higher fare both because of the opposition of the public and because of a legislative provision which fixed five

cents as the maximum fare. At the same time the rapid development of the private automobile and the commercial jitney bus was making large inroads into its urban and interurban traffic.[1]

The war intensified the strain upon the city's transportation system. Shipbuilding sprang up and speedily attracted to the city tens of thousands of men who had to be transported to and from their work. The rapid increase in the cost of living and of wages in other industries caused the street-car employees to demand higher wages, which the company was loath to grant, and a strike occurred in the fall of 1917 which was settled by a decided increase in wages. The rapid increase of prices, however, and the high wages paid in the shipbuilding industry, made it almost impossible for the company to maintain a standard force, and in the early summer of 1918 it was estimated that 20 per cent of the company's cars were idle during the peak hours because there were not any trainmen to man them. Adequate transportation of the shipyard workers was therefore impossible. The street-car employees demanded still higher wages, and, since the company declared that it could not meet the expense, the city was faced with the possibility of a complete stoppage of transportation.

The company then asked the city to permit a higher fare. Mayor Ole Hanson refused this request on July 6, 1918, but indicated certain concessions that he would make if the company would increase its wage scale to a minimum of fifty cents an hour and pay its overdue tax of 2 per cent on its gross earnings. Among these concessions were:

1. The inauguration of a system of skip-stops.
2. The elimination of street congestion due to parking of automobiles at curbs.
3. Emergency interchange of power between the city and the company.
4. Extra charge of one cent for transfers on certain lines.
5. Assistance in "staggering" of school hours and shopping hours to relieve the peak loads.

[1] In 1915 the revenues of the street-car system declined approximately $600,000 from those for the preceding year—a loss caused almost exclusively by jitney competition.

6. Discontinuance of service on certain lines where service was being maintained only to hold the franchise.

7. Relief of company for the period of the war from paying its overdue paving obligations which amounted to approximately $400,000.

The company refused this offer, and the city council on July 11 declared that it was its opinion that the company should "be permitted to earn on its railway system during the war an average net amount equal to that earned during the years 1913, 1914, 1915, 1916 and 1917." The Superintendent of Public Utilities was instructed to report what measures would be necessary to enable this to be done and at the same time "insure adequate service to the public and fair conditions to the employees." The superintendent, Mr. Murphine, reported a month later that if the company would accept the concessions proposed by Mayor Hanson and change 120 of its cars to one-man cars it would be able to meet the necessary increased wage cost. Further concessions that were suggested were the remission of the 2 per cent gross-receipts tax and the waiving of bridge rentals. Mr. Murphine, however, opposed any increase in fares.

The company declared that these concessions were insufficient, and Mayor Hanson then offered to lease the lines for the period of the war, guaranteeing the company a net return equal to that earned during the four preceding years.

This was refused by the company, which still insisted that an increase in fares be granted. The employees, who had been promised an increase if the city and the company could come to an agreement, were growing more and more restive, and a complete tie-up of the lines seemed imminent. On August 28 the company declared that it was ready to sell the lines unless a six-cent fare was granted, jitneys prohibited, and other concessions made. On the following day Mr. Hugh M. Caldwell, then corporation counsel, advised the Mayor that, though the city could not permit the company to charge a six-cent fare, if it leased the lines it could increase the rates. Mayor Hanson and the council then again rejected the company's proposal and renewed their offer of a lease to last until six months after the war. This was

again rejected by the company, and matters were apparently at a deadlock and continued so for a week.

At this juncture Mr. A. Merritt Taylor, a well-known street-railway man and then head of the Passenger Transportation and Housing Division of the Emergency Fleet Corporation, arrived in Seattle with the announced purpose of straightening out the tangle and securing adequate transportation for the shipyard workers. On September 6 he held a series of conferences between the company's local officers and the city officials. He recommended that the city grant an increase in fares, which the Mayor and council refused to do, and then proposed that the city buy the lines. Upon being asked how much they were worth, he is said to have declared that it was a public-utility rule that a line was worth approximately five times its annual gross revenue. Since the gross receipts for the first six months of 1918 had been approximately $2,150,000, he stated that the probable value was $22,500,000. The company's representatives then made a tentative offer of $18,000,000.

Men who were present at the meeting say that Mayor Hanson became enraged at this proposal and declared that he would not pay more than $15,000,000 for the lines, threatening the company strenuously unless it accepted this figure. Another councilman, who had hitherto not been regarded as unfriendly toward the company, also declared that he would become its enemy unless it accepted the offer. This offer was informally acquiesced in by all members of the council present. The company took the matter under advisement, communicated with the parent concern in Boston, and on September 12 announced that it accepted the proposal.

The next month was largely spent in working out the details of the sale which had been agreed upon in such an offhand fashion. A local firm of accountants was given ten days to prepare a report on the value of the street-railway property and reported that the company's books showed that a total of $15,300,000 had been expended in constructing the street-railway system. The report stated, however, that this amount made no allowance for the depreciation of the property and recommended that a thorough

accounting, together with a physical valuation, should be made before the deal was finally consummated. On October 21 the council voted to submit the question of buying the lines to an "advisory vote" of the people at the coming November election. Councilman Fitzgerald, the proponent of the measure, stated that "if the people vote yes we can purchase the lines if we want to, but if they vote no, we will not purchase them."[1] Some opposition to the purchase began to develop. Councilman O. T. Erickson, a strong supporter of municipal ownership, had been absent during the period in which the offer was made to the company. Shortly after his return he issued a statement that, should the proposed deal go through and the five-cent fare be continued, the city would lose approximately $1,600,000 a year. Mr. G. F. Cotterill, chief engineer of the State Highway Commission and an ex-mayor of the city, addressed a lengthy letter to Mayor Hanson and the city council in which he protested against the price that was being offered the company. Mr. Cotterill stated that the State Tax Commission and the State Board of Equalization had fixed the *full value* of *all* the properties of the company at $16,686,000 for 1918. The total property was assessed at 46 per cent of this, or $7,675,000. Mr. Cotterill pointed out that the transfer of the street railway did not include: (1) Two power-supply systems outside of King County (Seattle) valued at $2,225,000 in 1913, (2) The complete system of distribution and the business of supplying light and power within King County, including several large auxiliary steam-power plants, the various substations, the steam-heating systems covering the central business district of Seattle, and various tracts of real estate. Mr. Cotterill estimated that these properties were quite as valuable as the street railway itself. This gave a value for the street-railway property, according to Mr. Cotterill, of approximately $6,900,000, or less than one-half of what the city was offering.

Mayor Hanson vigorously defended the sale against these attacks. He declared that the lines would not only pay with the five-cent fare, but would yield a profit sufficient to retire the serial bonds issued to finance the sale when they came due.[2] He stated

[1] *Seattle Post-Intelligencer*, October 22, 1918.

[2] *Ibid.*, October 7, 1918.

that the taxpayers would never have to pay increased taxes to retire the bonds since "the lien [of the bonds] is only a lien on the earnings of the traction company's lines."[1] Mayor Hanson also issued a statement declaring that the physical valuation of the property was $16,102,946. This was arrived at by taking the cost of constructing six and one-half miles of unpaved single trackage and five-eighths of a mile of paved double trackage (1.25 miles of total track) on Division A of a short municipal line which had been constructed in 1912–14. The cost per mile of the unpaved trackage had been $21,477 and that of the paved double track $71,433. Mayor Hanson then applied these cost figures to the mileage of the traction company to arrive at the basic value of the company's lines, in the following manner:

60.6 miles of unpaved track at $21,477	$ 1,299,735
145.4 miles of paved track at $71,433	10,384,321
Rolling stock, car barns, etc.	4,418,980
Total	$16,102,946

Mayor Hanson's use of the cost figures of Division A as the 1918 valuation for the traction company's lines was clearly a false analogy for the following reasons:

1. The construction and materials in the Division A trackage were greatly superior to that of the traction company. The rails were 50 per cent heavier than the heaviest company rails[2] and 100 per cent heavier than the others. The pavement was eighteen feet wide and made of the best brick on a concrete base of extra thickness in which the ties were imbedded. It was also equipped with elaborate overhead trolley-wire construction and iron poles, together with two special crossings and several switches. All of these features were of much better quality and far more expensive than those of the traction company's lines.

2. It treated the traction company's lines as new and made no allowance for their depreciation. Some of the track was eighteen or twenty years old and practically all of it was at least eight or ten years old.

[1] *Seattle Post-Intelligencer*, October 20, 1918.

[2] With the exception of some grooved T rails on the so-called Second Avenue line

The attention of the public was, of course, concentrated not upon the street-railway situation itself but upon the war, which was then in its final stages. The citizens were undoubtedly somewhat relieved at the prospect of getting rid of the traction company and were not disposed to probe the Mayor's figures closely. All four of the papers,[1] including the radical *Seattle Union Record.* supported the measure. There was little discussion because of the war and the influenza epidemic, and at the election on November 5, a week before the armistice, the purchase was approved in a light vote, by a ratio of 3 to 1, there being some 13,000 votes for and 4,000 against.

It might have been expected that the signing of the armistice would have led to the cancellation of the purchase by the city, since the purchase was originally designed to meet only the war-time emergency. There was still plenty of time to withdraw. The city had signed no contract and was not obligated legally. Nor was the city bound by the November election. It had been specifically stated that the balloting was to be merely "advisory," and it will be remembered that Councilman Fitzgerald had declared that the approval of the electors did not commit the council unless the council also agreed. Even if it had still been believed that the purchase of the lines was necessary from the standpoint of public policy, the removal of the war-time emergency certainly made it advisable to take more time and follow the advice of the accountants in making a physical valuation which should take into account the possible depreciated value of the property.

Mayor Hanson and the majority of the council, however, did not alter their course, and carried through final negotiations with the company. The ordinances by which the traction property was finally purchased were passed late in December by a bare majority of the council, five members voting for, two against, and the remaining two being absent.[2] By these ordinances the city

[1] It is at least worthy of record that one of the papers, the *Post-Intelligencer*, was purchased during September, 1918, and later disclosures showed that the local manager of the Puget Sound Traction, Light, and Power Co. was one of the four men who furnished the purchaser with funds to buy the paper.

[2] The two negative votes were cast by Councilmen Lane and Erickson, who were regarded as the strongest supporters of municipal ownership on the council.

agreed to pay $15,000,000 for the traction lines under the following conditions: (1) The company was given the purchase price in twenty-year serial bonds drawing interest at 5 per cent. The first instalment of these bonds, however, was not to fall due until 1922, and after that they were to be retired at the rate of $833,000 per year for eighteen years.[1] (2) The principal and interest of these bonds constituted a first lien upon the *gross* earnings of the lines.[2] (3) The city bound itself to purchase from the company at the rate of one cent per kilowatt hour all power necessary to operate the lines. The city moreover agreed that when its own power developments, particularly the so-called Skagit project, made it possible to provide municipal power for the lines it would protect the company by cutting off a maximum of only 5,000 kilowatts per year of the company's power. Moreover, for every 5,000 kilowatts which were thus cut off, the city bound itself to purchase one substation from the company for a sum to be set by a board of appraisors. (4) The city freed the company from certain overdue paving obligations and from certain bridge rentals amounting in all to several hundred thousand dollars. Certain sections of real estate in the city, and rolling stock which the company claimed belonged to a subsidiary line outside of the city, were also exempted from the sale.

A friendly suit was instituted to test the legality of the sale, and the State Supreme Court declared that the terms of the purchase made by the city were proper and legal.

It will be remembered that Mayor Hanson had assured the voters that the principal and interest of the bonds could never cause an increase in taxation because they were only a lien upon the earnings of the lines. In the event of a deficit however, since the principal and interest of the bonds constituted a first lien upon the gross receipts of the lines, the net loss upon the lines would have to be met by taxation. Mayor Hanson's statement is thus

[1] As a matter of fact these bonds have sold below par so that their present market value is less than $15,000,000.

[2] The language of the ordinance reads: "The semi-annual payments of interest and such annual payments of principal shall constitute a charge upon such gross revenues superior to all charges whatsoever."

seen to have been most casuistical and to have conveyed a false impression.

II. THE OPERATION OF THE STREET-RAILWAY SYSTEM

The city took over the lines on April 1, 1919, and granted a substantial wage increase on that date, which was followed by another increase in the fall. Mayor Hanson resigned during the summer and was succeeded by his intimate supporter, Councilman Fitzgerald. During both of their administrations the lines were managed by the superintendent of public utilities, Mr. Murphine. Statements were issued purporting to show that the lines were making money and were proving a good investment. These statements, however, made no allowance for depreciation.

In the municipal election of 1920 Mr. Hugh M. Caldwell, the former corporation counsel, attacked the purchase, and pledged himself, if elected, to an investigation and, if fraud were shown, to an attempt to recover the excess purchase price. Mayor Fitzgerald, on the other hand, defended the transaction, but, although he was supported by all three privately owned papers[1] and by the large business interests, he was eliminated in the non-partisan primary elections by Mr. Caldwell and by Mr. James Duncan, the labor candidate. Mr. Caldwell then defeated Mr. Duncan in the election proper, in which the traction question did not appreciably figure. Shortly after the election, statistics were published by the City Comptroller's office showing a loss, when depreciation was included, of $517,000 on the lines for the nine months from April 1, 1919, to January 1, 1920. All but $18,000 of this was due to the depreciation factor.

The publication of these statistics, the campaign conducted by the Mayor, and the insistent protests of those councilmen who had always been opposed to the sale, began to awaken the city to a realization that their transit difficulties had not been settled by the mere act of buying out the private company. The city was confronted with the very grave problems of how to make the street-car system pay and how to retire the serial bonds which would begin to fall due in two years. Various lines of action presented themselves: (1) To effect economies in the street-car service.

[1] He was opposed of course by the *Union Record*, the labor organ.

(2) To increase revenues by increasing the fares. (3) To restrict or eliminate the jitney competition with the street-car system. There were nearly two hundred privately owned motor cars and busses carrying passengers on regular routes in the city whose total receipts were, at a conservative estimate, somewhere between $250,000 and $500,000 a year. (4) To attempt to force more favorable terms of purchase than those provided for in the formal sale of the lines. All four of these methods were resorted to with the following success:

Some administrative expenses were reduced by the new administration, which placed a practical railroad man, Mr. David Henderson, in direct charge of the system, but the savings here were not great. Proposals for the curtailment of service upon outlying and non-paying lines, moreover, naturally met with opposition from the adjacent residents and because of the political pressure appreciable savings were almost impossible to effect.

In July, 1920, the street-car fare was raised, not without opposition, from five cents to six and one-quarter cents (four tokens for twenty-five cents) with a flat cash fare of ten cents. Since practically everyone purchased tokens, this amounted to a 25 per cent increase in fares. The monthly passenger revenues increased from an average of $414,000, which had prevailed in the preceding months of 1920 (January to June inclusive), to $472,000 for the succeeding months (August to December inclusive). This was an increase of $58,000, or approximately 14 per cent, over the previous monthly income. This was accompanied by a falling off in the number of passengers carried of approximately 9 per cent.[1] This decrease in traffic permitted a reduction of service and a consequent reduction in the monthly pay-roll of approximately $10,000, or about 4 per cent, while the power costs decreased on the average slightly over $4,000 a month, or approximately 8 per cent. The total savings, therefore, of the increase in fares were about $72,000 per month plus the lessened wear and tear upon the equipment, track, etc. This fare was maintained for only approximately six months. In January, 1921, the fare was

[1] This was partially caused by the decline in Seattle's industrial population during these months.

increased to eight and one-third cents or three tokens for twenty-five cents. The cash fare was still maintained at ten cents.

The third possibility, that of limiting jitney competition, was early resorted to by the city. In May, 1920, the city council passed an ordinance providing that all jitney busses must secure a permit from the city before they could operate. The terms under which they could operate and the routes they could use were to be fixed by the Department of Public Utilities. The council later went on record as opposing the granting of any permits whatsoever under this ordinance, save as "feeders" in the outlying districts to the street railway and for interurban travel. The intent of the council has therefore unmistakably been not that of regulating jitney competition but that of suppressing it. This ordinance, however, has not yet (March, 1921) been enforced, since the jitney owners secured a temporary injunction enjoining the city from enforcing the original ordinance. A complicated legal battle ensued, and the matter is now before the State Supreme Court. If the court upholds the city's contention, as seems probable, the jitneys will be compelled to cease operation, since an initiative measure revoking the council's regulations was defeated at the polls. In the meantime the revenues of the municipal street-railway system are much less than they would have been had the ordinances been enforced immediately. This incident is of interest, since it serves to show the tendency of legislative and administrative officials to stamp out competition to municipal enterprises, and the general approval of these acts by the public which, under private ownership of the street-car lines, would undoubtedly have been strongly opposed to such a course of action.

The final possibility, that of attempting to force more favorable terms than those provided in the contract, was also resorted to. Mayor Caldwell received an appropriation of $10,000 to investigate the terms of the purchase and to determine whether any grounds existed for a suit to recover any "excess" amount that might have been promised the company. This investigation, including a physical valuation of the property, was carried on during the latter part of 1920 and was presented to a grand jury

in November. The physical valuation, conducted by Mr. Cyrus A. Whipple, was based upon a prior valuation by the State Public Service Commission several years previously which had never been completed. In contrast to the "valuation" made prior to the sale of the lines, the standard chosen was not the mere total original cost but the reproduction cost of the actual physical plant less depreciation. The basis of estimating the reproduction cost was the average price of each ingredient in the ten-year period, 1908-18, and each item was, after inspection, charged with depreciation according to the judgment of the engineer. As a result of this investigation, Mr. Whipple placed a value of $7,834,000 upon the physical property turned over by the company, or only slightly over one-half the amount paid by the city for the lines.

The grand jury reported that it was its belief that the price paid was excessive; that the company had wittingly unloaded the property upon the city, and that the city was entitled to "equitable relief" from the terms of the contract. The jury found, however, that while it believed Mayor Hanson had been guilty of slack business practice in neglecting to have a proper valuation made of the property before its purchase, there was no evidence presented to indicate that any of the city officials had themselves profited financially by the deal. These findings by the grand jury, while interesting, plainly did not contribute any definite plan for future action. The special investigator for the Mayor, however, made a report late in January, which was approved by the Mayor, declaring that the city should offer to rescind the contract and hand back the lines to the company, thus canceling the bonds, and that, if this proposal were rejected by the company, the city should then bring suit to rescind the sale. He further proposed that if the city council should refuse to take such action, a taxpayers' suit should be instituted to break the contract.

The situation at this time seemed to be especially acute, since $405,000 interest upon the street-railway bonds was due on March 1 for which no funds were at hand. In fact there was an actual deficit in merely operating the lines. The Mayor refused to permit a suggested transfer of $295,000 of surplus funds from the

municipal water and power systems and from the library sinking fund. The council not taking action, a group of business men applied for an injunction restraining the city from paying interest upon the railway bonds from the street-car revenues until after wages and other charges had been met, or paying any money to the company from the general funds of the city. This, in other words, was to make the bonds a residual charge upon the street-railway receipts instead of a prior charge as was specified by the contract. The courts, however, refused to grant a permanent injunction to this effect.

Contrary to the expectations of two months previous, the city was able to meet the interest charges on March 1 because of the greatly increased revenues in January and February coming from the eight-and-one-third-cent fare. If the earnings for the last few months are maintained, it seems probable that the city will not only be able to meet the operating and interest charges from the street-railway revenues, but will be able to retire at least a portion of the principal as well.

Today public opinion in Seattle is divided as to the proper future course to pursue. One group wishes to hand the lines back to the company, although it is probable that the company would not receive them. Still another group believes that the city should go ahead with public ownership and that it should meet its contract obligations. It is difficult to see how the courts will permit the city to do anything else. Certainly if the city hopes to maintain its general credit and wishes to market bonds to develop its Skagit River power project, it will be impossible to refuse payment upon its street-railway bonds.

There are likewise two opinions as to what fares should be charged under municipal ownership. One group, composed largely of the business and property interests, naturally desires to make the lines self-supporting and to increase the fares to such a point as will make this possible. The other, composed largely of the non-property-holding classes and many of the small property owners, favors a low fare with the deficit to be met from general taxation.

III. FINANCIAL STATUS OF THE MUNICIPAL STREET-RAILWAY SYSTEM AND A COMPARISON WITH PRIVATE OWNERSHIP

1. *The financial status of the street-railway system under private ownership.*—In order to judge adequately of the relative financial success of the street-railway system under municipal as compared with private ownership, it is necessary first to ascertain just what the financial record of the road was under the ownership of the Puget Sound Traction, Light, and Power Co. Fortunately the investigation made in the early summer of 1918 to secure the average prior annual earnings for the five and one-half preceding years gives us sufficient data upon this topic. The income, profit, and loss statement for this period is given by years in Table I.

TABLE I

REVENUES AND EXPENSES OF PUGET SOUND TRACTION, LIGHT, AND POWER COMPANY, SEATTLE STREET-RAILWAY DIVISION, JANUARY 1, 1913—JUNE 30, 1918

(In thousands of dollars)

	1913	1914	1915	1916	1917	Total	Yearly Average	6 Months 1918
Total revenues	3,665	3,656	3,012	3,153	3,565	17,051	3,410	2,177
Passenger	3,558	3,544	2,935	3,084	3,512	16,633	3,326	2,144
Miscellaneous	107	112	77	69	53	418	84	33
Total expenses	1,967	1,910	1,823	1,952	2,173	9,824	1,965	1,313
Operation:								
Conducting transportation	1,000	1,000	982	1,003	1,189	5,174	1,035	688
Power	62	55	57	56	79	309	62	37
Miscellaneous	456	429	394	436	441	2,156	431	307
Maintenance:								
Way and structures	194	178	161	218	202	954	191	99
Equipment	255	248	215	223	245	1,186	237	154
Power	......	......	18	20	19	57	11	29
Excess of revenue over expenses	1,699	1,746	1,189	1,201	1,392	7,227	1,445	864
Franchise tax	73	73	62	65	73	346	69	44
General property tax (apportioned to railway)	233	269	251	277	285	1,316	263	168
Depreciation	627	640	653	663	671	3,253	651	341
Net revenue	766	764	223	196	363	2,312	462	311

This apparently indicates that the average net income of the lines for the five years 1913 to 1917 inclusive was $462,000, or approximately 3.1 per cent on a $15,000,000 valuation. It should be noted, however, that the lines were charged with an annual

average of only $62,000 for power, which was furnished by the power plant of the same company. It is understood that the rate used in computing this was that of one mill per kilowatt hour, a rate far less than the existing commercial power rates and only one-tenth of that which the city now pays the company for the municipalized lines. In other words, the power business of the company was being used to help carry the traction line. It is also perhaps doubtful whether the depreciation charges were adequate.

Probably the most accurate statement of the real financial situation during the preceding year was that made by Messrs. Pratt and Leonard, the local managers, in a telegram sent to the home office of Stone & Webster in September, 1918, in which they recommended the sale of the lines. They declared that "if trade finally consummated, we will be receiving 5 per cent on full value property which for the last seven years has earned after proper allowance for power and depreciation 1.35 per cent on this value and for the last five years eight-tenths of 1 per cent."[1] The "full value" referred to was plainly intended as $15,000,000, and it is safe to conclude, therefore, that the real net earnings of the company for the preceding five years had not exceeded $120,000 annually and may have been much below this figure.

2. *Financial status of the street-railway system under municipal ownership and operation.*—Table II gives the income, profit, and loss statement of the lines for twenty-one months of municipal ownership and operation, dating from April 1, 1912, to December 31, 1920, as prepared by the City Comptroller.

This shows an apparent loss of $1,590,000 for the twenty-one months of operation, to which should be added property retirements during 1920 which were not included in the foregoing statement at the time it was issued, but which the Comptroller estimated would approximate $165,000, or a total direct loss of $1,755,000.

The foregoing losses, however, are not all. The taking over of the lines by the city meant the loss of tax revenues formerly paid by the private company and the assumption by general funds of

[1] Telegram of September 6, 1918, uncovered by the grand jury. See *Seattle Post-Intelligencer*, February 1, 1921.

expenses properly chargeable to the street-railway system itself. These invisible items should, of course, be included in any appraisal of the financial aspects of the municipal line. Among them may be mentioned: (1) payment by other departments of salaries for services performed in reality for the street-railway system; (2) the

TABLE II

REVENUES AND EXPENSES OF THE SEATTLE MUNICIPAL STREET-RAILWAY SYSTEM, APRIL 1, 1919—DECEMBER 31, 1920

(In thousands of dollars)

	April 1–Dec. 31, 1919 (9 Months)	Jan. 1–Dec. 31, 1920 (12 Months)	Total
Total revenues	4,158	5,462	9,620
Passenger	4,031	5,284	9,315
Miscellaneous	127	178	305
Expenses	3,570	4,993	8,563
Operation:			
Conducting transportation	1,950	2,644	4,594
Power	559	684	1,243
Miscellaneous	250	389	639
Maintenance:			
Way and structures	283	457	740
Equipment	528	734	1,262
Profit and Loss:			
Delayed Losses	....	20	20
Property retired from service	....	62	62
Miscellaneous	....	3	3
Interest on bonds	607	866	1,473
Depreciation	499	677	1,176
Deficit	517	1,073	1,590

loss of free rides for policemen and firemen; (3) the cost of repairing pavings and crossings; (4) loss of general property tax on street-railway property; (5) loss of 2 per cent tax on gross revenue; (6) loss of payments for police protection; (7) loss of payments for maintenance and upkeep of bridges; (8) loss of payments for repairing the paving between the tracks. An attempt has been made by the City Comptroller to measure these losses, which are shown in Table III.

This shows that the invisible items of loss of the city during the first twenty-one months were approximately $1,213,000, which, added to the direct loss of $1,755,000, forms a total loss for the period of $2,968,000.

By far the largest part of this loss accumulated during the period of the five-cent fare. Following the installation of the

TABLE III

INVISIBLE LOSSES OCCASIONED BY MUNICIPAL OWNERSHIP OF STREET-RAILWAY SYSTEM*

	April 1–Dec. 31, 1919	Jan. 1–Dec. 31, 1920	Total
Salaries (legal, financial, administrative)	$17,570	$33,445	$51,015
Rent	2,729	6,126	8,555
Office expenses	15,572	3,358	18,930
Transportation (police and fire department)	38,000	54,000	92,000
Street repairs	30,000	20,871	50,871
General property tax	342,000	434,646	776,646
Franchise tax	83,160	105,680	188,840
Fees for police protection	4,050	5,400	9,450
Bridge maintenance fees	7,755	9,122	16,877
Total	$540,836	$672,648	$1,213,484

* This does not include some $64,000 of bridge fees remitted at the time of the sale, and $1,850 auditing fee for services rendered prior to the sale.

six-and-one-quarter-cent fare in July the monthly direct losses decreased greatly as is shown by Table IV.

TABLE IV

DIRECT LOSSES, SEATTLE MUNICIPAL STREET-RAILWAY SYSTEM BY MONTHS, 1920

Month	Loss
January	$ 109,000
February	102,000
March	114,000
April	101,000
May	165,000
June	184,000
July	84,000
August	26,000
September	51,000
October	64,000
November	33,000
December	40,000
Total	$1,073,000

During the first quarter of 1921, on account of the increase in fare to eight and one-third cents, the finances improved greatly,

and during February and March the lines actually made money over and above the expenses directly charged to them.

Despite the more recent improvement in earning power, a loss in the first twenty-one months of ownership of so staggering a sum as $2,968,000 seems, at least at first sight, to be an effective indictment of municipal ownership itself, and has indeed been widely advertised as such. It is well, therefore, to consider whether this is true or whether the traction company itself under similar circumstances would have fared equally ill.

3. *To what extent were the losses due to municipal ownership and operation?*—As a preliminary step in the determination of whether these losses are chargeable to municipal ownership and operation per se, or whether they were inherent in the situation, let us assume that had the private company owned and operated the lines during this period, they would have succeeded in raising the fares to the same amount and at the same time as the municipality.[1] With the revenue therefore the same, what would have been the relative expense of the two methods of management?

It is clear that no completely definite answer can be made to this question. Nevertheless it is possible, by considering a number of factors, to throw much light upon the problem and indeed to arrive at a tolerably accurate judgment upon the matter.

a) Interest Payments and Profits: During the first twenty-one months of municipal ownership, the city paid out $1,473,000 in interest charges to the bond holders, or a yearly rate of $842,000; $1,212,500 of this was paid to the company and the remainder on bonds issued for the early municipal line and for improvements. The books of the Puget Sound Traction, Light, and Power Co., on the other hand, as shown in Table I, indicated a total net profit of $790,000 for the two and one-half years from January, 1916, to July, 1918, or a yearly rate of $316,000. In other words, the private company received $434,000 a year, or $759,000 for the twenty-one months, more than they would have received had they owned the lines and received the same annual profit as in the preceding period. On the other hand, of course, the company would

[1] As a matter of fact, it is improbable that the private company would have been able to raise the fares to that point.

have enjoyed higher revenues and hence greater net earnings had it been able to secure the 25 per cent increase in fares which the city enjoyed during the last six months of the period. Even assuming that all of the $72,000 monthly gain thus secured would have gone to swell the net earnings, we still have an excess of $327,000 more paid to the company than they would have been able to earn for themselves. This amount cannot be said to be a loss due to municipal operation, but to be a guaranty to original investors of an amount that they would have been unable to earn under private ownership.

b) Power Charges: The city is paying for its power at the contracted rate of one cent per kilowatt hour, and has expended $1,242,000 for power during the first twenty-one months. The

TABLE V

WAGES OF TRAINMEN ON SEATTLE STREET-RAILWAY SYSTEM

Date	First 3 Months		4th–6th Month		7th–12th Month		Over One Year	
	Cents per Hour	Relative	Cents per Hour	Relative	Cents per Hour	Relative	Cents per Hour	Relative
Prior to municipal ownership	46	100	46	100	48	100	50	100
April 1, 1919	53.1	116	56.3	122	56.3	117	59.4	119
October 1, 1919	59.4	129	59.4	129	65.6	131	65.6	131

Puget Sound Traction, Light, and Power Co. charged the lines, when under their ownership, at the rate of only one mill per kilowatt hour, or one-tenth the rate now paid by the city. This difference in the power rate accounts for $1,119,000 of the deficit, which would have been removed had the city paid the same rates as those enjoyed by the lines under private ownership.

c) Wage Costs: The municipal lines have been operating under a higher wage scale than that which existed under private ownership. The city has made two increases in wages, which are shown in comparison with the wages paid when the city took over the lines in Table V.

In addition, when the city took over the lines it established the basic eight-hour day and granted time and one-half for everything

worked in excess of this. Beginning on January 1, 1920, the city granted an annual two weeks' vacation with pay to its street-railway employees, thus causing an increase of approximately 4 per cent in the wage costs. The increases granted the trainmen have been paralleled for other employees of the system. The increase in the total wage cost over the company's total can then be estimated at 17 per cent during the six months prior to October 1, 30 per cent from then to the beginning of 1920, and 34 per cent after that date. The approximate amount of these increases is shown below.

TABLE VI

INCREASE IN WAGE COST UNDER MUNICIPAL OWNERSHIP

Period	Total Wage Cost	Amount Payable under Prior Sale	Amount Due to Increases
April 1–October 1, 1919	$1,250,000	$1,068,000	$182,000
October 1–December 31, 1919	700,000	539,000	161,000
January 1–December 31, 1920	2,644,000	1,970,000	674,000
Total	$4,594,000	$3,577,000	$1,017,000

It is thus seen that the increased wage scales resulted in a heightened expense of approximately $1,017,000. It may be objected, of course, that the very fact that wages were thus advanced is proof of the city's incapacity to protect itself against the demands of its employees. It is difficult, however, to see how either the city or the company could have done anything else. Appreciable increases were necessary to prevent the men from leaving for other jobs, and even after the second increase, hourly wages in the street-railway system were much below wages in occupations requiring equal skill. The granting of the two weeks' vacation leave with pay would probably not have been given under private ownership, but it is in harmony with the employment practices of most government bureaus and many advanced private firms. On the whole, it is probably a good business policy and raises the morale of the force. It increases the stability of labor by helping to hold men longer in their positions despite the lower pay. It thus reduces the turnover cost, which for motormen is very high.

d) Maintenance and Depreciation: The city in its first twenty-one months of operation expended $1,962,000 for maintenance,

while the private company in the year and a half from January 1, 1917, to July 1, 1918, expended only $661,000. The city, in other words, spent approximately $84,000 a month for maintenance to the company's $36,700, or a total for the twenty-one months of $993,000 more than the private company would have expended had it continued its maintenance outlay at its former rate. Nor was as much of this increase caused by the increased cost of materials as one might think. Building materials, it is true, cost in 1920 over double what they did in 1917, but metal products, which are a more important factor, in 1919 were 20 per cent below their 1917 level and in 1920 were 10 per cent below.

The increased expenditure for maintenance was largely caused by the fact that both the rolling stock and the ways and structures were in bad condition when the city took over the lines.[1] A great deal of money had to be spent to put the lines into passably good shape, and much of the expenditure charged to maintenance has been in actuality spent for improvements. Despite the nearly two years of added wear and tear, the physical condition of the property today is probably nearly as good as, and perhaps better than when it was turned over. In other words, the depreciation factor may have been offset by the increased expenditures nominally charged to maintenance but in reality constituting additions to the plant. To this extent, therefore, that part of the deficit attributed to depreciation may be more apparent than real.

Summarizing the discussion of the preceding points, it may be said that expenditures of the street-railway system have been increased by the following unavoidable[2] amounts:

Increased interest	$ 327,000
Increased power charges	1,119,000
Increased wage costs	1,017,000
Increased maintenance charges	993,000
Total	$3,456,000

Had it been possible to avoid these expenses, the lines would have yielded a surplus of approximately $500,000 after deducting both

[1] Stone and Webster, however, do not agree with this statement. They do not believe that the lines had been running down more than a year.

[2] Unavoidable, that is, granted that the terms of the sale were what they were.

direct and indirect expenses. Had the roads been purchased at a smaller figure, the expenses naturally would have been less. Had $10,000,000 been the sum paid, a saving of $437,000 in interest would have been effected, while the charge for the factor of depreciation would have been $392,000 less, or a total lessened deficit of $829,000. While any accurate estimate of the actual worth of the properties purchased is plainly impossible, both because of the paucity of data and the conflicting theories of public-utility valuation, it seems most probable that $10,000,000 would have far more closely approximated the real value than $15,000,000. Mr. Whipple's report fixed the reproduction cost less depreciation at slightly less than $8,000,000. Even if we make a liberal allowance for possible understatements of value in this report, it is difficult to see how they could have been sufficient to bring the total up to $15,000,000.[1] A valuation on the basis of original cost less depreciation would have given a lower figure than Mr. Whipple's, while if the reproduction cost had been taken for the single year 1918 it would have been higher. Public-utility authorities in general favor such an averaging of reproduction costs as practiced by Mr. Whipple rather than the use of any one year.

Taken all in all, it seems difficult to escape the conclusion that the city by its offhand method of purchase probably paid much more for the system than it was worth under almost any accepted method of public-utility valuation.

IV. SUMMARY AND CONCLUSIONS

It is not municipal ownership and operation in itself that has been discredited by the Seattle experiment. The city has probably done as well or better with the street railways than any private company could have done under similar circumstances. It is worthy of note, however, that the city was forced to raise the fares and probably would have been compelled to do so even had they purchased the lines at an appreciably lower figure. Neither

[1] A valuation of the lines had been made for the company more than a year prior to the sale which the company announced as totaling over $15,000,000. The valuation theory followed was not explicitly stated, however, and the report itself was not turned over to the city when it purchased the lines.

city nor company could have made the lines pay under the five-cent fare.

What the Seattle experience does demonstrate is the necessity for business prudence and accurate valuation on the part of any governmental body taking over an enterprise.

The Seattle story points still another moral. When the private owners of public utilities feel themselves too strongly menaced by the forces of labor upon the one hand and the public regulation of rates upon the other, they are likely to do what they did in Seattle, namely, declare themselves for public ownership and offer to sell their property—at a high figure. By doing so they can retire secure in the possession of larger interest payments than they could have enjoyed under private ownership and with all the worries of management shifted to the shoulders of the state. Such may indeed be the policy adopted by the railroad owners if business depression continues and other means fail. State socialism may well prove, in the key industries at least, to be the most effective protection of capitalism. In consequence, the supporters of public ownership may have to beware of new-found friends.

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